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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,983	12/03/2004	Luppo Edens	BJS-4662-357	1387
23117 7590 08/29/2007 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER LILLING, HERBERT J	
			ART UNIT 1657	PAPER NUMBER
			MAIL DATE 08/29/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/516,983

Applicant(s)

EDENS ET AL.

Examiner

HERBERT J. LILLING

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 6-15 and 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 6-15 and 22-24 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Receipt is acknowledged of an amendment filed August 15, 2007.
2. Claims 1-24 remain pending in this instant application which application is a 371 of PCT/EP03/05876 filed June 03, 2003 and claims benefit to EPO 02100667.1 filed June 04, 2002.
3. Claims 6-15 and 22-24 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 5, 2007.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

a.> Claims 1-5 and 16-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention with respect to the new formulas submitted which includes ... "Pro-Xaa.....and Xaa<sub>2</sub>.....naturally occurring amino acid..."

Applicant is not entitled to add just any new "formula" without any support in the instant specification. Applicant has failed to provide support for the above formulas.

b.> The specification has been found to be **TOTALLY DEFECTIVE** to support the claimed product(s) as defined by claims 1-5 and 16-21 absent a definition for the claims "Xaa<sub>1</sub> and Xaa<sub>2</sub>....." in the expression "Pro-Xaa.....and Xaa<sub>2</sub>.....naturally occurring amino acid...".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-15 and 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 16-21 stand rejected under 35 U.S.C. 102(b/e) as anticipated by the references for the same grounds as submitted in the previous office action for the claimed tripeptides even though the product(s) are produced by different methods by

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the prior art. It is immaterial as to the method for producing the products as long as the products meet the claimed tripeptides absent a showing to the contrary. The arguments have been deemed not to be persuasive to withdraw the rejections which stand as recited:

"1. Ito et al "A tripeptides 'anticodon' deciphers stop codons in messenger RNA", Nature 403 pg 680-684 (February 10, 2000);

2. Pfister, E.A., "Identification and Synthesis of Chemotactic Tripeptides From Alkali-Degraded Whole Cornea A Study of N-Acetyl-Proline-Glycine-Proline and N-Methyl-Proline-Glycine-Proline," Investigative Ophthalmology and Visual Science; Jun. 1995; 36(7): 1306-16 ;

3. Haddox et al., U.S. 6,310,041 ;

4. St. Pierre et al., U.S. 5,856,308.

Each of the references teaches a product having 100% mol of isolated tripeptides containing a terminal proline that is considered to be within the scope of all of the claimed products.

**St. Pierre et al** discloses the following:

In attempts to clarify the correlation between the primary and secondary structures of collagen, a variety of polypeptides with repeating sequences (Pro-Pro-Gly), (Pro-Hyp-Gly), and others have been synthesized and evaluated during the past twenty years.

**Haddix et al** teaches the following:

Preferably, the neutrophil chemoattractant is selected from the group consisting of N-acetyl-PGP, N-acetyl-PGX, N-methyl-PGX, N-methyl-PGP and small peptide chemoattractants containing proline and glycine.

Five complementary peptides were tested as potential inhibitors of **N-acetyl-PGP**: ----- RTR (SEQ ID NO:2), RTRGG (SEQ ID NO:3), RTR dimer, RTR tetramer, and ASA (SEQ ID NO:4) tetramer. In addition, the RTR tetramer and both monomeric peptides (RTR and RTRGG) were tested, separately, for inhibition of the ultrafiltered tripeptide chemoattractants or LTB.sub.4 ----- .;

which tripeptide is within the scope of the claims.

**Pfister** teaches the hydrolysates from cornea to yield the tripeptides N-Acetyl-Proline-Glycine-Proline and N-Methyl-Proline-Glycine-Proline.

**St. Pierre et al** discloses the following:

The studies also demonstrated that collagen contains a large number of tripeptide sequences of the form of Pro-Hyp-Gly, Pro-X-Gly, or X-Hyp-Gly, where X is an amino acid residue other than Pro, Gly, or Hyp.

Pioneering work on synthetic collagen models has also been done with polydisperse mixtures of sequential polytripeptides containing Pro and Gly (J. Mol. Biol. 43:461, 1969). Monodisperse oligotripeptides of (Pro-Pro-Gly).sub.n or (Pro-Hyp-Gly).sub.n sequences, where  $n=2-10$ , have also been prepared, with X-ray diffraction patterns of the former, wherein  $n$  was 4 or greater showing collagen-like diffraction patterns. Circular dichroism spectra of penta- and octadecapeptide films cast from solution are consistent with the conformation of collagen (Biopolymers 17:1215, 1978).

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St. Pierre teaches a tripeptides within the scope of the claimed product(s) for the broad language as submitted:

"1. A protein hydrolysate which is rich in tripeptides whereby the tripeptides are rich in proline at one end thereof.";

the tripeptides(s) is any product that can be isolated from the hydrolysis of any protein. The language of the claims do not exclude the reference tripeptides(s)."

6. **No claim is allowed.**

7. Applicant has elected product claims. Applicant is required to be in full compliance with the following for rejoinder of the process claims upon the allowance of the elected product claims.

**F.P.: Ochiai/Brouwer Rejoinder form paragraph:**

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or**

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**otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).



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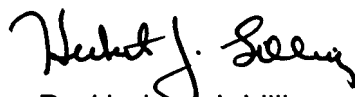
9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lilling whose telephone number is 571-272-0918 and Fax Number is **571-273-8300**, or SPE Jon Weber whose telephone number is 571-272-0925. Examiner can be reached Monday-Friday from about 7:30 A.M. to about 7:00 P.M. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit **1657**  
August 26, 2007



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